ynx. The suprathyroid artery was tied, believing that he had to deal with a disease of the thyroid; but it was finally decided that the knotty induration extended deeply beneath the sternum, and Billroth decided that further attempts at extirpation were not justified. Four months later the conditions were found to be considerably worse. In the second case the operation was still more difficult, and was followed by an unfortunate result. In this case a knotty induration existed upon the left side, corresponding to that lobe of the thyroid. Only the smallest œsophageal sound could be introduced, and that with great paim. Hoarseness and paralysis of the left vocal cord existed, and the trachea was narrowed in two places. During the operation both œsophagus and trachea were torn, and a canula placed therein, and complete extirpation was successfully accomplished. The patient perished, probably from hæmorrhage, in a few minutes after leaving the table. A small opening was found in the innominate vein, which, however, did not bleed at the time of operation, probably for the reason that it was strongly dragged upon in an upward direction. Billroth calls attention to the exceedingly unfavorable diagnosis of the disease. Diagnosis of this condition of the thyroid is somewhat difficult and the prognosis most unfavorable. Prominent symptoms are, induration of the thyroid, accompanied by radiating pains, and difficulty of breathing and swallowing.—*Wein. Med. Woch.*, 1888, No. 20.

G. R. FOWLER (Brooklyn).

VIII. On Cartilaginous Growths of the Larynx. By Dr. FERUCIO PUTELLI (Venice). The patient, a goldsmith. æt. 50 years, was several times the object of a medical examination on account of a mitral insufficiency. The hoarseness which then also was present was ascribed to his continual use of the blow-pipe, and as independent of the heart disease. Upon post-mortem examination there was found with moderate œdema of the glottis, a pale red tumor lying beneath the vocal cords. The hardened preparation showed that to the cricoid cartilage was attached a half globular tumor, arched somewhat backward, but especially forward, somewhat rough on the surface, yet very hard and not displaceable. The mucous membrane covering it

was very tense and thin. The entire lower laryngeal space was closed except about a 3 mm. slit. This tumor, about 26 mm. thick and 23 mm. long, consisted of cartilage, which appeared centrally soft and sprinkled with bluish-white; peripherally there appeared normal hyaline cartilage. The vocal cords and joints presented no abnormalities.

The *histological examination* yielded hyaline cartilaginous tissue with very rich basis substance. The tumor contrasted strongly with rest of the cartilaginous tissue, as the normal cartilage showed much less basis substance and a regular disposition of fine cartilage cells. At the anterior periphery of the tumor there were small calcified spots, superficially situated, and sometimes small osseous lamellæ. The arrangement of the tissue makes it seem probable that the enchondroma originated centrally in the cricoid cartilage and growing forward caused the cricoid cartilage to nearly disappear.

The literature which Putelli passes critically in review produces only 8 cases of true *enchondroma* (as a contrary to the ekchondroses), the cases of Froriep, Türck, Billroth, Musser, Bertoyer, Boecker, Birch-Hirschfeld, Putelli). Of these 3 were diagnosed only in the cadaver, the others as tumors intra vitam, but only as enchondromas in Billroth's cases where there was a piece of the tumor coughed up.

The etiology of this disease, seen indeed only in males between the ages of 38 and 62, and *prognostically* unfavorable, is obscure.

Its *seat* is nearly always the cricoid cartilage plate; its size varies between that of an almond on to a walnut.

The *symptoms*, dependent of course upon the seat and extent of the tumor, are referred to the changes in the voice, the respiration and the act of swallowing.

The *diagnosis* is "always very difficult," as the growth rarely appears. One should call to mind, 1, the long duration; 2, the slow progression; 3, the presence of a very consistent tumor, covered by the mucous membrane, smooth, round and situate between the surface of the cartilage, unaccompanied by any glandular swellings or changes in the larynx. Inflammatory symptoms are absent, hence one may exclude *perichondritis*.

As to the *treatment* of the tumor it can never be eradicated endo-

laryngeally not even by means of the galvano cautery, by means of which new dangers could easily be brought forward, as perichondritis, necrosis.

The removal of the tumor can only be done extralaryngeally. The method of operation is different, according to the seat of the tumor. If its site be in the plate of the cricoid cartilage, then a partial excision of the cricoid cartilage is rendered difficult, as 1, the tumor, even if it is seated upon the side of the cartilage, is never confined to the one side of the cartilage but sometimes arises from the center; 2, the tumor sometimes not only is confined to the larynx but also may extend into the pharynx, where the anterior pharyngeal wall would not be spared. Billroth "enucleates" the tumor from the neck by means of subhyoid pharyngotomy, but he soon observed a recurrence. Boecker removed the tumor by tracheo-laryngotomy, with the entire cricoid cartilage, leaving the arytenoid cartilage and the vocal cords. Putelli recommends this method of operation; after which the patient (5 weeks after) left the hospital, and with a tracheal canula, with but little trouble in breathing and phonation — *Wein. Med. Jahrb., N. F.*, III, 7, p. 351, 1889.

F. H. PRITCHARD (Boston)

CHEST AND ABDOMEN.

1. **A New Method of Operating for Thoracic Empyema.** By Dr. M. SSUBBOTIN. In cases of long standing empyema, in which plastic measures for securing obliteration of the pleural cavity by collapse of the chest walls are indicated, the author successfully performed the following operation: A portion of the 7th rib (6 to 8 ctm.) is resected in the usual manner, and the pleural cavity is opened and thoroughly irrigated. This opening is packed in order to prevent septic infection. A longitudinal incision is now made upon the external edge of the pectoralis major muscle, of about 5 ctm. in length, by means of which latter the author bares the 6th, 5th and 4th ribs. Without removing the periosteum, from each of these ribs a small wedge is resected, so that the rib becomes movable at this point. A similar longitudinal incision is now made in the posterior axillary line, and at